IV.12 AGRICULTURAL LAND AND PRODUCTION

The analysis in this chapter addresses potential impacts to agricultural resources from adoption and implementation of the Desert Renewable Energy Conservation Plan and Bureau of Land Management (BLM) Proposed Land Use Plan Amendment (LUPA). Aside from livestock grazing (see Section III.16), there is no agricultural production on BLM lands. Most BLM lands also have little or no farming potential. Agricultural lands and production are considered in this DRECP environmental impact statement (EIS) to assess potential indirect impacts to nearby or adjacent agriculture from renewable energy and transmission projects on both BLM and non-BLM lands. Existing conditions for agricultural resources appear in Volume III, Chapter III.12. Grazing is addressed separately in Chapter IV.16, Livestock Grazing.

IV.12.1 Approach to Impact Analysis

Analysis of impacts on agriculture typically relies on data from the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), as well as its data from the California Land Conservation Act of 1965, known as the Williamson Act.

There is no designated or mapped farmland on BLM lands. The majority of the DRECP area (78%) has not been mapped by the FMMP because it is either public land or very remote. Williamson Act contracts apply only to privately owned land, so no Williamson Act lands are within BLM lands or other federal or tribal lands. Transmission development on agriculture lands is compatible with Williamson Act contracted land, so those contracts are not considered in this analysis.

This analysis focuses on potential future solar, wind, geothermal, and transmission development within DFAs on BLM lands and how they could adversely (though indirectly) affect Important Farmland. Two types of impacts are assessed in this chapter: (1) impacts on adjacent agricultural operations from renewable energy facilities within DFAs, and (2) impacts of transmission facility development on Important Farmland.

The potential impacts on Important Farmland from renewable energy development and its associated transmission right-of-way (ROW) requirements were assessed, in part, through review of the Solar Programmatic Environmental Impact Statement, the Wind Programmatic EIS, and the Geothermal Programmatic EIS. Impacts related to renewable energy projects and their associated facilities would vary depending upon the proposed technology, location of project site, time and degree of disturbance from development, and the size and complexity of the project.

Whether development of renewable energy projects on BLM lands could affect agriculture on non-BLM lands would depend on the relative proximity of a renewable energy project to

the agricultural land. The location of transmission facilities on agricultural lands would similarly depend upon the location of the lines. This requires knowledge of both actual project sites and agricultural lands. Impacts are therefore assessed only generally and qualitatively here because specific project sites are not known.

IV.12.2 Typical Impacts Common to All Action Alternatives

IV.12.2.1 Impacts of Renewable Energy and Transmission Development

There are many ways to assess and define agricultural soil quality, and impacts from renewable energy projects to adjacent agricultural operations could affect high quality agricultural soils. Because of the scope of this high level analysis, this document relies only upon FMMP farmland classifications. FMMP farmland classifications are based partly on soil quality and partly on agricultural use. The FMMP designates Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance; for purposes of this analysis, all are collectively identified as "Important Farmland."

IV.12.2.1.1 Impacts of Site Characterization

Site characterization activities for projects in DFAs or in transmission corridors outside of the DRECP area would have minimal impact on agricultural production. Characterization activities typically involve site access to perform studies and development of new access if none exists. In areas with agricultural production, access typically is available via existing farm roads or cross country, and is not constrained by topography; generally, new access roads would not be required. Any damage to crops is typically compensated through mitigation payments by developers.

IV.12.2.1.2 Impacts of Construction and Decommissioning

The impacts on adjacent agriculture operations would be similar for construction of solar, wind, and geothermal projects and transmission lines. These impacts would include (1) damage to equipment, crops, and livestock from increased traffic on farm roads; (2) competition for water resources, including groundwater; (3) water and soil contamination; (4) suppression of crop growth by fugitive dust; (5) soil erosion; and (6) the spread of weeds.

IV.12.2.1.3 Impacts of Operations and Maintenance

The operation and maintenance of renewable energy and transmission facilities would create some ongoing impacts on adjacent agricultural lands. These impacts include (1) damage to equipment, crops, and livestock from increased traffic on farm roads; (2) competition for water resources, including groundwater; (3) water and soil contamination; (4) soil erosion; (5) spread of weeds; and (6) shading of crops.

IV.12.2.1.4 Impacts of Ecological, Cultural, and Recreation Designations

The Proposed LUPA would designate ecological and cultural conservation and recreation areas only on BLM-administered lands. There would be no impacts to private agriculture lands.

IV.12.3 Impact Analysis by Alternative

IV.12.3.1 No Action Alternative

The No Action Alternative assumes that the state's renewable energy goals would be achieved without the DRECP and that renewable energy and transmission development in the DRECP area would be developed on a project-by-project basis in a pattern consistent with past and current renewable energy and transmission projects. Any areas excluded from development by statute, regulation, or proclamation would retain those exclusions. Areas excluded administratively would continue to be assessed based on management guidance within BLM local field office land use plans.

IV.12.3.1.1 Impacts of Renewable Energy and Transmission Development

Under the No Action Alternative, development of renewable energy would be authorized on a project-by-project basis. The impacts defined for the No Action Alternative are similar to those described in Section IV.12.2.1. However, because there are no DFAs on BLM lands under the No Action Alternative, renewable energy projects could be built on BLM lands not otherwise precluded from development.

Impact AG-1: Renewable energy development on BLM lands and resulting transmission lines would impair agricultural use of adjacent agricultural operations.

Important Farmland designations do not apply to BLM lands; therefore, development of renewable energy projects under the No Action Alternative would not convert Important Farmland to nonagricultural use. Development of projects on BLM land could affect adjacent non-BLM lands designated as Important Farmland; so outside of BLM lands, transmission development could affect Important Farmland. Under the No Action Alternative, DRECP area potential impacts include (1) damage to equipment, crops, and livestock from increased traffic on farm roads; (2) competition for water resources, including groundwater; (3) water and soil contamination; (4) suppression plant growth by fugitive dust; (5) soil erosion; (6) spread of weeds; and (7) shading of crops.

Existing laws and regulations would reduce impacts of renewable energy projects in the absence of the DRECP LUPA. Relevant regulations are presented in the Regulatory Setting in Volume III, Chapter III.12. The Solar Programmatic EIS includes numerous Design

Features (Appendix W) that would reduce the impacts of solar energy development on adjacent agricultural operations as a result of development in BLM Solar Energy Zones and Solar PEIS variance lands. These Design Features address soil resources and erosion (SR1-1, SR2-1, SR3-1, SR3-2, SR4-1, SR4-2, SR4-3, ER2-1); water quality (WR1-1, WR2-1, WR3-1, WR4-1, ER1-1); air quality (AQC1-1, AQC2-1, AQC3-1, AQC4-1); weed management (ER3-1); hazardous materials (HMW1-1, HMW2-1, HMW3-1, HMW4-1, HMW4-2, HS1-1, HS2-1, HS3-1); restoration after decommissioning (ER4-1); and land use conflicts (LR1-1).

IV.12.3.1.2 Impacts of Ecological and Cultural Conservation and Recreation Designations

The Proposed LUPA would designate ecological and cultural conservation and recreation areas only on BLM-administered lands. There would be no impacts to agriculture.

IV.12.3.1.3 Impacts of Transmission Outside the DRECP Area

Additional transmission lines would be needed to deliver renewable energy to load centers (areas of high demand) outside the DRECP area. It is assumed that new transmission lines outside the DRECP area would generally use existing transmission corridors between the DRECP area and existing, upgraded, substations in the more heavily populated areas of the state. The areas through which new transmission lines could pass are San Diego, Los Angeles, North Palm Springs–Riverside, and the Central Valley. With regard to agricultural lands, these areas are described in Chapter III.12, Agricultural Land and Production, Section III.12.5. For agricultural resources, two primary concerns are whether affected land is in contract under California's farmland preservation program known as the Williamson Act, or whether the agricultural land has been identified as Important Farmland under the California Department of Conservation FMMP. Williamson Act land within a 3-mile swath (1.5 miles on either side of the line) of each transmission corridor ranges from 0 acres in the Los Angeles area to over 300,000 acres in the Central Valley area. As with Williamson Act lands, the acreage and categories of mapped farmland and their distributions vary widely by area.

Impact AG-1: Renewable energy development on BLM lands and resulting transmission lines would impair agricultural use of adjacent agricultural operations.

Transmission towers have a relatively small footprint within an agricultural field or orchard, causing only a relatively small loss of any agricultural lands. Agricultural practices can generally continue on ROW lands under transmission lines, except where the land is occupied by towers or access roads. In cases where new lines are in or adjacent to existing transmission ROWs, new access roads are generally not required. In any case, access is generally infrequent after project construction.

Once installed, transmission towers are unlikely to have adverse effects on adjacent agricultural lands. One potential exception would be crop dusting in heavily agricultural areas such as the Central Valley, where towers and conductor spans could pose a risk to aircraft. However, crop dusting planes commonly work in these areas and avoid existing poles, towers, and wires. Pilots create their crop-dusting patterns to account for linear transmission lines. In addition, the lines outside the DRECP area would be near or adjacent to existing lines, so their presence is already accounted for in crop dusters' established work environments.

IV.12.3.2 Preferred Alternative

The impacts of the Preferred Alternative on baseline conditions, including transmission development outside the DRECP area, appear in the following sections.

IV.12.3.2.1 Impacts of Renewable Energy and Transmission

Under the Preferred Alternative, renewable energy projects under the Proposed LUPA are confined to DFAs on BLM lands. Important Farmland designations do not apply to BLM land; therefore, development of renewable energy projects under the Preferred Alternative would not convert Important Farmland to nonagricultural use. Outside BLM lands, transmission line development could affect Important Farmland, most of which would be in the Imperial Valley and Blythe areas.

Impact AG-1: Renewable energy development on BLM lands and resulting transmission lines would impair agricultural use of adjacent agricultural operations.

Renewable energy and transmission development under the Preferred Alternative could adversely impact adjacent agricultural operations. Potential types of impacts would be the same as for the No Action Alternative.

Similar to the No Action Alternative, existing laws and regulations will reduce certain implementation impacts. Relevant regulations are presented in Volume III, the Regulatory Setting.

IV.12.3.2.2 Impacts of Ecological and Cultural Conservation and Recreation Designations

The Proposed LUPA would designate ecological and cultural conservation and recreation areas only on BLM-administered lands. There would be no impacts to agriculture.

IV.12.3.2.3 Impacts of Transmission Outside the DRECP Area

Outside of the DRECP area, the impacts of transmission on agricultural land and production would be the same under all alternatives. New renewable energy from the DRECP area would be exported through the same substations and transmission grid for all alternatives. These impacts are as described for the No Action Alternative in Section IV.12.3.1.3.

IV.12.3.2.4 Comparison of the Preferred Alternative With No Action Alternative

There would be impacts to agricultural resources under both the Preferred and No Action Alternatives. The No Action Alternative's available areas for development are widely distributed across the DRECP area. The DFAs in the Preferred Alternative are clustered in the Imperial Borrego Valley and Cadiz Valley and Chocolate Mountains ecoregion subareas. Because DFAs under the Preferred Alternative would be less extensive than the amount of BLM land potentially developed under the No Action Alternative, there would be less opportunity for conflicts to arise with adjacent agricultural land under the Preferred Alternative. The effects of transmission development within the DRECP area would be similar under all alternatives.

IV.12.3.2.5 Comparison of the Preferred Alternative With Other Action Alternatives

The proximity of agricultural land to DFAs varies little among the action alternatives. Most agricultural land in proximity to DFAs is in the Imperial Valley and the Blythe area. The impacts from renewable energy facility development on DFAs in each of the alternatives would be similar in nature and scope to those under the Preferred Alternative.

Under each action alternative, renewable energy-related activities in the DRECP area are confined to DFAs on BLM land. Important Farmland designations do not apply to BLM land; therefore, development of renewable energy projects under any action alternative would not convert Important Farmland to nonagricultural use. However, because DFAs under any of the action alternatives would be less extensive than the amount of BLM land potentially developed in renewable energy projects under the No Action Alternative, there would be less opportunity for conflicts to arise with agriculture in the DRECP area. Outside BLM lands, transmission development could affect Important Farmland and would be similar among all alternatives.